Fig. S-1 FT-IR spectra of (A) 4,4'-dipyridine-silica hybrid monolithic column and (B) chloropropyl silica monolithic column.



Fig. S-2 XPS spectra of (A) 4,4'-dipyridine-silica hybrid monolithic column and (B) chloropropyl silica monolithic column.



Fig. S-3 Effect of retention factor (k') of the four alkylbenzenes against ACN concentration on 4,4'-dipyridine-silica hybrid monolithic column. Experimental conditions: 5 mM NaH₂PO₄ containing different ACN contents; applied voltage, -20 kV; detection wavelength, 214 nm.



Table S-1 Run-to-run, day-to-day and column-to-column repeatability of migration time for 4,4'-dipyridine-silica hybrid monolithic column by using DMSO (EOF marker) and four aromatic hydrocarbons as test solutes.

Analyte	$RSD_{R}(\%)^{a)}$	$RSD_D(\%)^{b)}$	$RSD_{C}(\%)^{c)}$
Benzene	0.61	3.8	3.8
Naphthalene	0.78	3.0	5.1
Fluorene	0.62	2.8	4.2
Anthracene	0.43	2.6	4.7

a) RSD_R : RSD of run-to-run, n=5.

b) RSD_D: RSD of day-to-day, n=3.

c) RSD_C : RSD of column-to-column, n=3.